

IN THE CLAIMS:

Please AMEND claims 19, 22, 23 and 25, as follows. For the Examiner's convenience, all claims currently pending in this application have been reproduced below:

1-18. (Cancelled)

19. (Currently Amended) A scan type exposure apparatus comprising:

a first stage on which a first object is placed;

a second stage on which a second object is placed;

a projection optical system for projecting a pattern of the first object onto the second object;

a scanning mechanism arranged to scanningly move said first and second stages in a timed relation with each other, relative to said projection optical system, while the pattern of the first object is projected by said projection optical system onto the second object; and

a signal system systemized to store data corresponding to a change in an exposure condition, wherein the change in the exposure condition is produced in response to scan motion of at least one of said first and second stages and in accordance with one of scan acceleration and scan speed, and wherein the data is measured beforehand by obtaining data of a projected image of the pattern of the first object, being formed on the second object through said projection optical system, while scanningly moving at least one of said first and second stages, said signal system further being systemized to ~~increase and decrease the scan speed of at least one of said first and second stages~~ control a scan speed of at least one of said first stage and said second

stage, during exposure of one shot in an actual exposure process so as to compensate for a change in the exposure condition, while reflecting a correction value, as determined on the basis of the data stored, to the scan speed of at least one of said first and second stages.

20. (Previously Presented) An apparatus according to claim 19, wherein the correction value is determined with respect to deviation of the projected image of the pattern of the first object, upon the second object.

21. (Previously Presented) An apparatus according to claim 19, wherein the correction value is determined with respect to a focus error of the projected image of the pattern of the first object, upon the second object.

22. (Currently Amended) A device manufacturing method comprising:
a pattern exposure step for performing exposure by use of a scan type exposure apparatus including (i) a first stage on which a first object is placed, (ii) a second stage on which a second object is placed, (iii) a projection optical system for projecting a pattern of the first object onto the second object, (iv) a scanning mechanism arranged to scanningly move the first and second stages in a timed relation with each other, relative to the projection optical system, while the pattern of the first object is projected by the projection optical system onto the second object, and (v) a signal system systemized to store data corresponding to a change in an exposure condition, wherein the change in the exposure condition is produced in response to scan motion of at least one of the first and second stages and in accordance with one of scan acceleration and

scan speed, and wherein the data is measured beforehand by obtaining data of a projected image of the pattern of the first object, being formed on the second object through the projection optical system, while scanningly moving at least one of the first and second stages, the signal system further being systemized to ~~increase and decrease the scan speed of at least one of the first and second stages~~ control a scan speed of at least one of the first stage and the second stage, during exposure of one shot in an actual exposure process so as to compensate for a change in the exposure condition, while reflecting a correction value, as determined on the basis of the data stored, to the scan speed of at least one of the first and second stages; and

a development step for developing the second object pattern exposed by the scan type exposure apparatus, wherein a circuit pattern can be formed on the basis of the developed exposed pattern.

23. (Currently Amended) A scan type exposure apparatus comprising:

a first stage on which a first object is placed;

a second stage on which a second object is placed;

a projection optical system for projecting a pattern of the first object onto ~~the~~ the second object;

a scanning mechanism arranged to scanningly move said first and second stages in a timed relation with each other, relative to said projection optical system, while the pattern of the first object is projected by said projection optical system onto the second object;

storing means for storing data related to a shift in a projected image due to vibration of said projection optical system; and

drive control means for ~~increasing and decreasing a scan speed of at least one of said first and second stages~~ controlling a scan speed of at least one of said first stage and said second stage, during exposure of one shot so as to compensate for a change in the exposure condition, on the basis of the stored data.

24. (Previously Presented) A scan type exposure apparatus according to claim 23, wherein the vibration of said projection optical system is produced in response to scan motion of at least one of said first and second stages and in accordance with one of scan acceleration and the scan speed.

25. (Currently Amended) A scan type exposure apparatus, comprising:

- a first stage on which a first object is placed;
- a second stage on which a second object is placed;
- a projection optical system for projecting a pattern of the first object onto the second object;
- a scanning mechanism arranged to scaningly move the first and second stages in a timed relation with each other, relative to said projection optical system, while the pattern of the first object is projected by said projection optical system onto the second object; and
- a signal system systemized to store data corresponding to a change in an exposure condition, wherein the change in the exposure condition is produced in response to scan motion of at least one of said first and second stages and in accordance with one of scan acceleration and scan speed, and wherein the data is measured beforehand by obtaining data of a projected image

of the pattern of the first object, being formed on the second object through said projection optical system, while scanningly moving at least one of the first and second stages, said signal system further being systemized to ~~increase and decrease the scan speed of at least one of said first and second stages~~ control a scan speed of at least one of said first stage and said second stage, during exposure of one shot in an actual exposure process, while reflecting a corrective value, as determined on the basis of the data stored with respect to deviation of the projected image of the pattern of the first object upon the second object, to the scan speed of at least one of said first and second stages.